AMENDMENTS TO THE CLAIMS

Claims 1-3 (Cancelled)

4. (Currently Amended) ~~The method of manufacturing a semiconductor device according to claim 2~~ A method of manufacturing a semiconductor device including a plurality of processing processes, the method comprising:

a first step of acquiring a measurement value pertaining to a wafer to be subjected to a predetermined processing process;

a second step of determining processing requirements for the predetermined processing process on the basis of the measurement value; and

a third step of performing the predetermined processing process in accordance with the processing requirements determined in the second step, wherein the predetermined processing is etching of a predetermined film to be processed, and the predetermined measurement value is a value expressing a physical quantity of the film to be processed,

wherein the film to be processed is a silicon oxide film including impurities, and the measurement value is the concentration of impurities contained in the silicon oxide film.

5. (Currently Amended) ~~The method of manufacturing a semiconductor device according to claim 2~~ A method of manufacturing a semiconductor device including a plurality of processing processes, the method comprising:

a first step of acquiring a measurement value pertaining to a wafer to be subjected to a predetermined processing process;

a second step of determining processing requirements for the predetermined processing process on the basis of the measurement value; and

a third step of performing the predetermined processing process in accordance with the processing requirements determined in the second step,

wherein the predetermined processing is etching of a predetermined film to be processed, and the predetermined measurement value is a value expressing a physical quantity of the film to be processed,

wherein the measurement value is the refractive index of the film to be processed.

6. (Currently Amended) A ~~The~~ method of manufacturing a semiconductor device ~~according to claim 2,~~ including a plurality of processing processes, the method comprising the steps of:

dry etching a predetermined film to be processed;

wet etching, after said step of dry etching, the predetermined film to be processed;

acquiring, after said step of dry etching, the dimension of the film to be processed;

determining processing requirements for said step of wet etching on the basis of the dimension of the film to be processed; and

wherein ~~the measurement value is the dimension of the film to be processed~~ said step of wet etching is performed in accordance with the processing requirements.

7. (Currently Amended) The method of manufacturing a semiconductor device according to claim ~~1~~ 4, wherein the first step comprises a sub-step in which a measurement apparatus disposed in a manufacturing line acquires the predetermined measurement value;

the second step includes a sub-step in which the measurement apparatus transmits the predetermined measurement value to a main computer disposed in the manufacturing line, and a sub-step in which the main computer determines the processing requirements on the basis of the measurement value by reference to a processing recipe stored in the main computer in advance; and

the third step includes a sub-step in which the main computer transmits the processing requirements determined in the second step to a processing apparatus disposed in the manufacturing line, and a sub-step in which the processing apparatus performs the predetermined processing process in accordance with the processing requirements.

8. (Currently Amended) The method of manufacturing a semiconductor device according to claim ~~1~~ 4, wherein the first step comprises a sub-step in which a measurement apparatus disposed in a manufacturing line acquires the predetermined measurement value;

the second step includes a sub-step in which the measurement apparatus transmits the predetermined measurement value to a main computer disposed in the manufacturing line, a sub-step in which the main computer transmits an instruction signal determined on the basis of the measurement value to a processing apparatus disposed in the manufacturing line, and a sub-step in which the processing apparatus determines the processing requirements on the basis of the measurement value by reference to a processing recipe stored in the main computer in advance; and

the third step includes a sub-step in which the processing apparatus performs the predetermined processing process in accordance with the processing requirements determined in the second step.

9. (Currently Amended) ~~The method of manufacturing a semiconductor device according to claim 1~~ A method of manufacturing a semiconductor device including a plurality of processing processes, the method comprising:

a first step of acquiring a measurement value pertaining to a wafer to be subjected to a predetermined processing process;

a second step of determining processing requirements for the predetermined processing process on the basis of the measurement value; and

a third step of performing the predetermined processing process in accordance with the processing requirements determined in the second step, wherein:

the predetermined processing is wet etching of a predetermined film to be processed;

the predetermined measurement value is a value expressing the physical quantity of the film to be processed;

the method further comprises a fourth step of counting a time which has elapsed since replacement of a chemical to be used for the wet etching;

in the second step, wet-etching processing requirements are determined on the basis of the measurement value and the elapsed time; and

in the third step, wet etching of the film is performed in accordance with the wet-etching processing requirements.

10. (Original) A method of manufacturing a semiconductor device, comprising the steps of:

wet etching a predetermined film to be processed;

counting a time which has elapsed since replacement of a chemical to be used for the wet etching; and

determining processing requirements for the wet etching on the basis of the elapsed time;

wherein said wet etching is performed in accordance with the processing requirements.

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Claims 11-19 (Withdrawn)